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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,108	02/10/2005	Naotaka Tsunoda	264542US6PCT	4242

  

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EXAMINER	
DIAO, M BAYE	

  

ART UNIT	PAPER NUMBER
2838	

  

NOTIFICATION DATE	DELIVERY MODE
11/21/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/524,108

Applicant(s)

TSUNODA, NAOTAKA

Examiner

M'baye Diao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims** 1, 2 + 4-12 B.P. 9/13/07

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Amendment*

1. Acknowledgement is made of Amendment filed on 09/19/2007.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-2,4 – 7, & 9 - 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe, US PAT 5,095,382.**

3. As per claims 1,9 & 11, Abe discloses (abstract; col. 3, lines 7-14 & 49+; col. 4, lines 1-68) and shows in Figs. 1 & 5-6:

a charging apparatus(3) for charging a secondary battery (2) (not shown but incorporated within the wireless headphone (2)) when mounting an apparatus (wireless headphone (2)) having a built-in secondary battery (not shown) on a battery charger (3), the charging apparatus (3) characterized by:

the battery charger (3) comprising an engaging section (6)and a contact member ((7a) and (7b)); and

the apparatus (3) comprising an electrode ((7a) and (7b)) for supplying power (through a rechargeable battery terminal (21)) to the secondary battery (incorporated into the wireless headphone (2))upon establishing contact between an engaged section ((23a) and (23b)) engaging with the engaging section (6) and the contact member ((7a) and

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(7b)); wherein

if the apparatus (3) is mounted on the battery charger (3) so as to engage the engaged section (21) with the engaging section (6), the electrode ((7a),(7b)) is press-attached against the contact member ((23a),(23b)) (col. 5, lines 3-31), thus meeting the limitation of, "if the apparatus is mounted on the battery charger so as to engage the engaged section with the engaging section, the electrode is press-attached against the contact member with a force greater than a weight of the device due to angular moment centered about the engaging section of the apparatus due to the weight of the apparatus", and

a receptacle surface (6) (recess-shaped concave, thus meeting the limitation of a substantial circular arc shape) wherein the engaged section (21) is engaged by the engaging sections (contact member ((23a), (23b)) when the apparatus is turned on the receptacle surface (6), and the electrode stops ((7a), (7b)) at a position where contact is made with contact member ((23a),(23b)) (col. 5, lines 3-31) (i.e. when the apparatus is mounted on the receptacle surface (6) for charging, see col. 5, lines 3-9 & 23-31)(claims 1,7) .

As per claim 9, Abe also shows in Figs. 1, & 5-6:

a charging device (not shown, but provided within the transmitter body(3)) provided with an apparatus (3) employing wireless communication (claim 7)(col. 5, lines 1-3), and a battery charger (3) serving a dual purpose of a mounting table for mounting the apparatus (3) when the apparatus (3) is not in use, the charging device (3) characterized by:

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the apparatus (3) comprising a receiving means of (16,17,18) for receiving a signal ((19),(20)) in a wireless manner and the battery charger (3) comprising a transmitting means (5) for transmitting signals (audio signals) to the apparatus (3) in a wireless manner;

the apparatus (3) comprising an electrode (7a,7b) and an engaged section (6), and the battery charger (3) comprising a contact member ((23a),(23b)) and engaging section (6); wherein

if the apparatus (2) is mounted on the battery charger (3) so as to engage the engaged section (21) with the engaging section (6), the electrode ((23a),(23b)) is press-attached against the contact member ((7a),(7b)) (col. 5, lines 3-31), thus meeting the limitation of, "if the apparatus is mounted on the battery charger so as to engage the engaged section (21) with the engaging section (6), the electrode (7a,7b) is press-attached against the contact member (23a,23b) with a force greater than a weight of the device (2) (since the electronic circuits (31) and (32) are also incorporated within the filter cap (16a) on the top portion of the head band portion (8), and thus does add an extra weight to the that of the device (2)) due to angular moment taking a position of engagement of the engaged section (21) and the engaging section (21) as a fulcrum due to the weight of the apparatus (2)" (claim 9). Further, since the method merely recites elements providing an engaging section, providing an electrode for supplying power to the secondary battery, and supplying power via the contact member, the method would be inherent in view of the device.

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As per claims 4 - 5, Abe further discloses (col. 3, lines 51-68; col. 4, lines 33-61; col. 6, lines 4 - 11) that the charging device (3) characterized in that the battery charger (3) is provided with a wireless transmission means (a transmitted infra-red light signal from the transmitter (1) is received by wireless headphone (2)) and the apparatus (2) is provided with wireless receiving means (16,17,18), wherein the receiving means (16,17,18) of the apparatus (2) and an output means (the demodulated audio signal received by receiving elements (19),(20)) supplied with an output (reproduced by headphone unit portions (11) and (12) are driven by the secondary battery (incorporated into the wireless headphone (2)) when the apparatus (2) is removed (when the listener wearing wireless headphone (2) is lying down) (col. 6, lines 52-59) from the battery charger for use.

As per claim 6, Abe discloses (abstract) that a wireless headphone in which an infrared light signal transmitted from a transmitting apparatus (1) (inherently an infrared generator would be provided) is received (inherently, an infrared receiver would be provided at the receiver unit (2)) and reproduced as an audible sound by a headphone unit (2) portion.

Accordingly, claims 1,4 - 7,9 & 11 are anticipated.

As per claims 2 & 12, Abe further discloses (col. 5, lines 1-9) that a rechargeable battery terminal portion (21) is provided at the central portion (center of gravity) of the headband portion (8) (applicant's hanger section) and, when engaged with terminals (7a) and (7b) (applicant's electrodes) of transmitter body (3) (applicant's apparatus), is adapted to recharge the secondary battery (2), thus making the method inherent in view of the

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device, thus meeting the limitation of, "if the engaging section engages with the engaged section when the apparatus is mounted on the battery charger, the electrode makes contact with the contact member at a position between a perpendicular line passing through a center of gravity of the apparatus and the engaging section".

Accordingly, claims 2 & 12 are anticipated.

4. As per claim 10, Abe also discloses (col. 3, lines 7-14 & 49+; col. 4, lines 1-68; col. 5, lines 15-43) and shows in Figs. 1 & 5-6:

The charging device (2), characterized in that an electrode (22)(23a,23b) is provided at a lower portion (see Figs.1 & 6)) of the apparatus (2), wherein if the apparatus (2) is mounted on the battery charger (3), the electrode (23a,23b) is press-attached against a contact member(7a,7b) provided on a receptacle surface (6) of the battery charger (3).

Accordingly, claim 10 is anticipated.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe, US PAT 5,095,382 in view of Matsumoto et al., (Matsumoto) US PAT 4,027,113.**

As per claim 8, Abe discloses the claimed invention except that the receptacle surface (6) of the battery charger (3) forms a recess-shaped concave instead of a circular arc shape.

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Matsumoto discloses (col. 10, lines 15 - 17) and shows in Figs. 1,3 - 4 & 12, that a rectangular shape for coupling the headphones to the base plate is an equivalent structure known in the art. Therefore, because these two shapes were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the rectangular recess taught by Abe for the circular recess (15), for advantages such as to provide a headphone which is arranged so that its casing can be rotated freely in universal directions and that the headphone can be rotated in a smooth manner and that the headphone can be provided in a very compact size (col. 2, lines 35-39), as per the teachings of Matsumoto.

Accordingly, claim 8 would have been obvious.

### ***Response to Arguments***

1. Applicant's arguments filed 09/19/2007 have been fully considered but they are not persuasive.
2. Applicant argues that Abe does not include the feature that nothing other than the gravitational force of holds the headphones against the contact member with a greater force than a weight of the device due to ...section.
3. Examiner respectfully disagrees and submits that Abe teaches (see col. 5, lines 5-31) and shows in Fig. 6, that in addition to the weight of the headphone device (2), a rechargeable battery terminal, and electronic circuits (31) and (32) which may include amplifying circuit and the like are incorporated within the filter cap (16a), thus adding more weight than that of the device (2). Furthermore, Abe also discloses that the



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receptacle (6) is concave shaped which meets the limitation of forming a substantial circular arc.

4. Applicant argues that no matter how Matsumoto is combined Abe, the combination does not teach all the limitation of claim 1 (see rejection of claim 1 above).

5. Examiner respectfully disagrees and submits that Abe when combined with Matsumoto teaches all of the limitation of claim 1. Furthermore, in regard to claim 8, Matsumoto discloses(col. 10, lines 15 - 17) and shows in Figs. 1,3 - 4 & 12, that a rectangular shape for coupling the headphones to the base plate is an equivalent structure known in the art. Therefore, because these two shapes were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the rectangular recess taught by Abe for the circular recess (15), for advantages such as to provide a headphone which is arranged so that its casing can be rotated freely in universal directions.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M'baye Diao whose telephone number is 571-272-9748. The examiner can normally be reached on M-TH from 8:00 am to 5:00 pm. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah, can be reached on M -TH from 7:30 am to 5:00 pm at 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M'baye Diao  
Examiner  
Art Unit 2838

M.D



**BAO Q. VU**  
**PRIMARY EXAMINER**